

**ABSTRACT**

A signal processing system is well suited for conditioning a speech signal prior to coding the speech signal to achieve enhanced perceptual quality of reproduced speech. The signal processing system may be incorporated into mobile or portable wireless communications devices, wireless infrastructure equipment, or both. The signal processing system includes a filtering arrangement for filtering an input speech signal to make a spectral response of the speech signal more uniform to compensate for spectral variations that might otherwise be imparted into the speech signal by a communications network associated with the signal processing system.